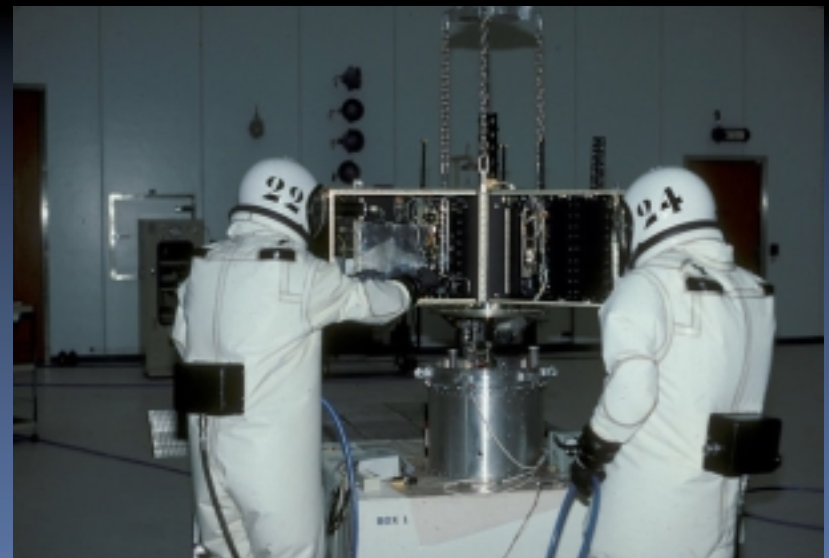
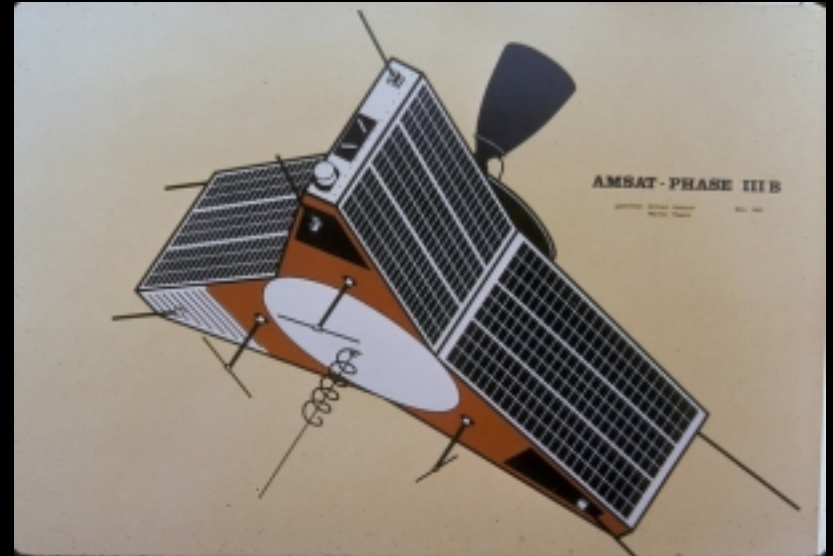
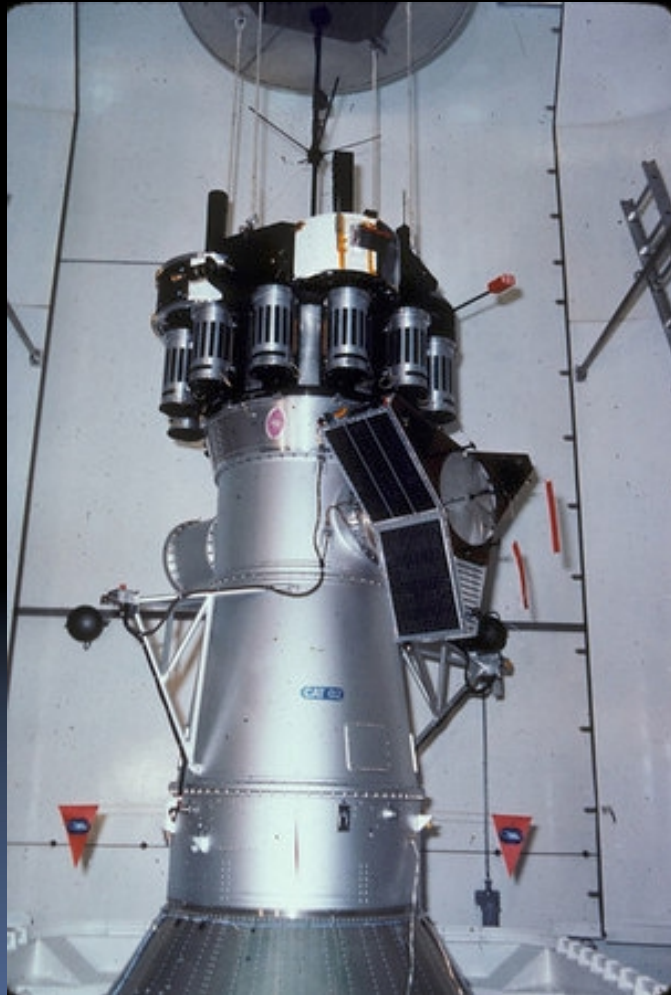




déjà vous all over again
Bob McGwier N4HY
AMSAT V.P. Engineering

AMSAT'S PHASE IV LITE?

Phase III program



AMSAT-DL and AMSAT-NA

- Friends forever?



AMSAT wanted Phase IV badly

Attitude control

Power

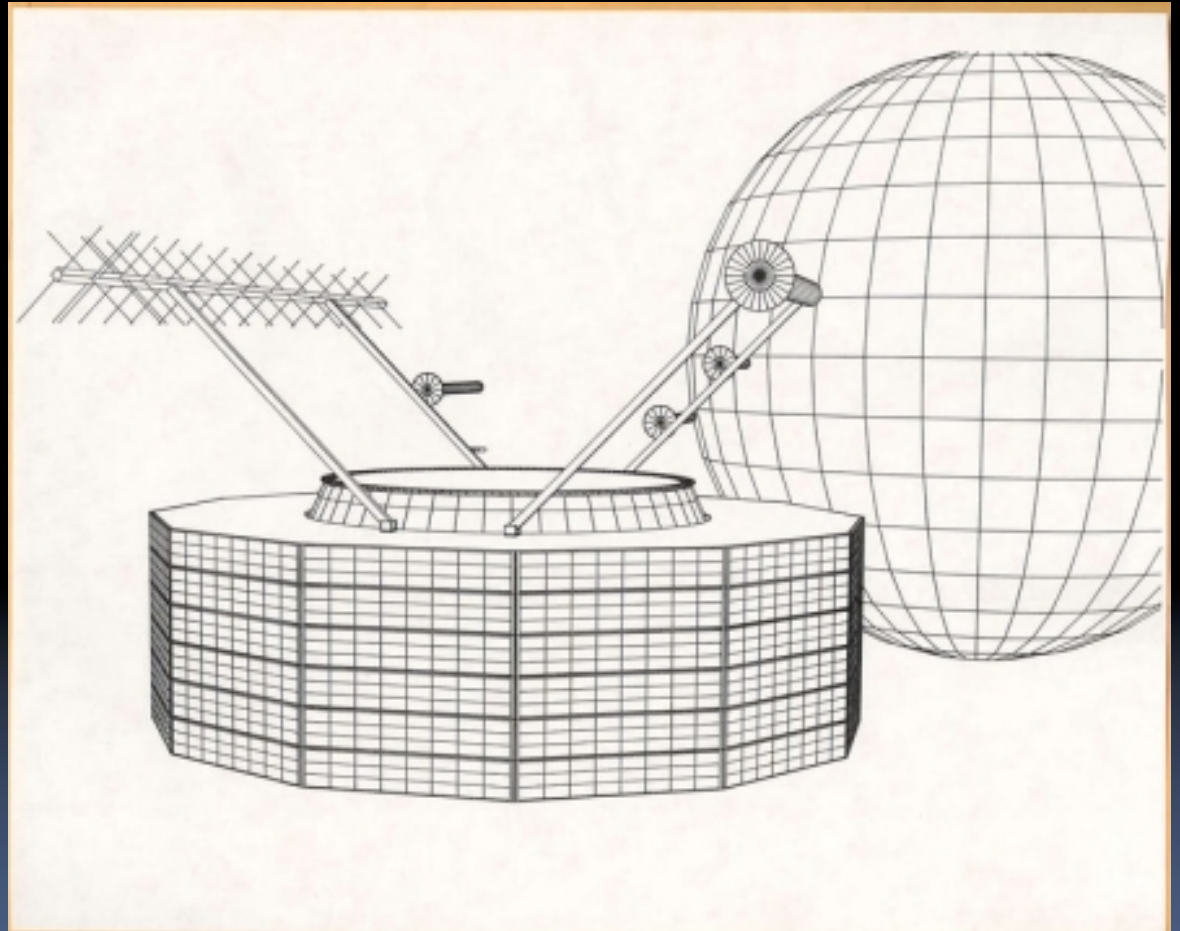
Motor

Antenna Pointing
accuracy a requirement

Hard Sensors to design
and build

The trapezoidal cross
section “cone” is the
support for the main
payload!

SERIOUS thermal
control systems
required



AMSAT's Phase IV was started

Heat Pipes

Support Structure

WE GAVE UP!



Karl calls and we answer

AMSAT DL calls a design meeting to consider building another Phase 3 bird. Phase 3D required lots of (MUCH YOUNGER) engineering than AO-10 and AO-13.

Stumpfelstahl Hotel,
Marburg, Germany,
May 1990. P3D first
design meeting.



AMSAT's Phase 3D becomes AO-40

What happens if you take the big cone out of the middle of the spacecraft (as in Phase IV)?

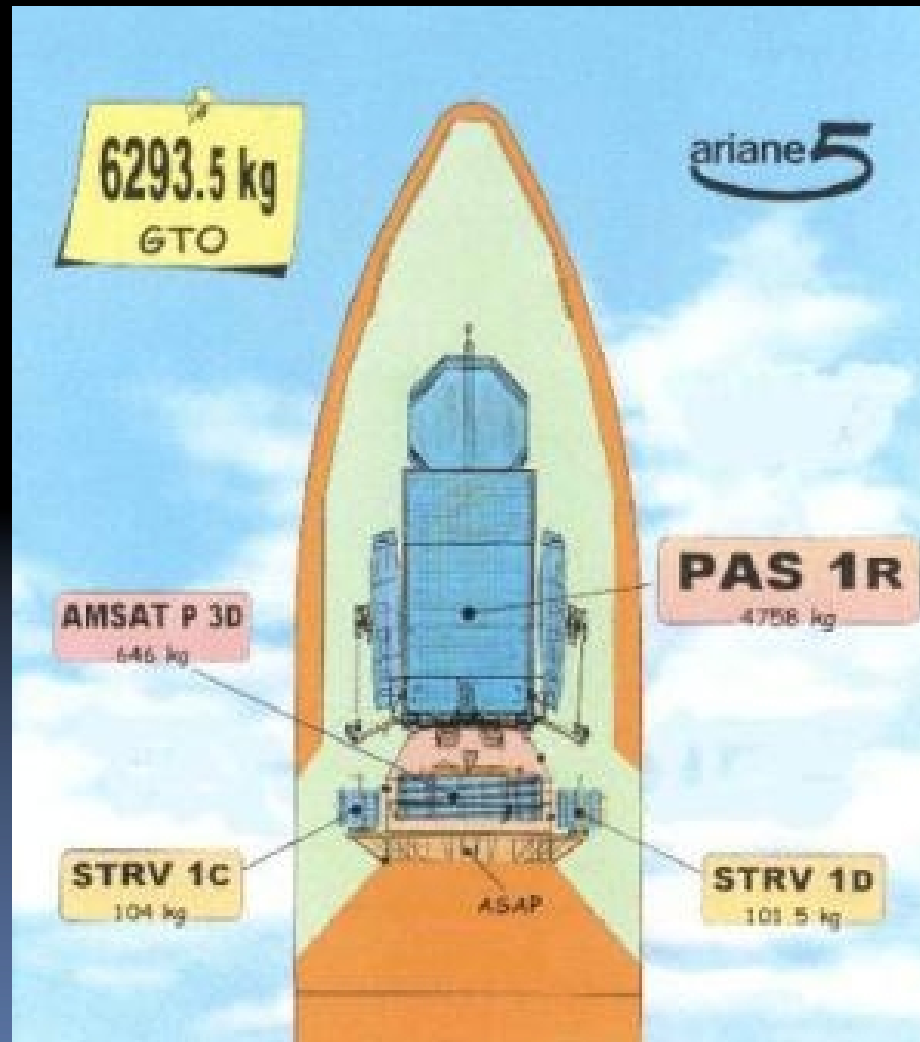
YOU FILL IT UP WITH COMPLEXITY!

You get myriad failures in this extremely complex system.



Lets carry a heavy load

We carried Panamsat 1
into orbit!



AMSAT is designing Eagle

- 60 cm on the edges, lots of antenna space



AMSAT's excited engineers



SECONDARY PAYLOAD HOSTING OF SPACE ASSETS ON INTELSAT COMMERCIAL SATELLITES

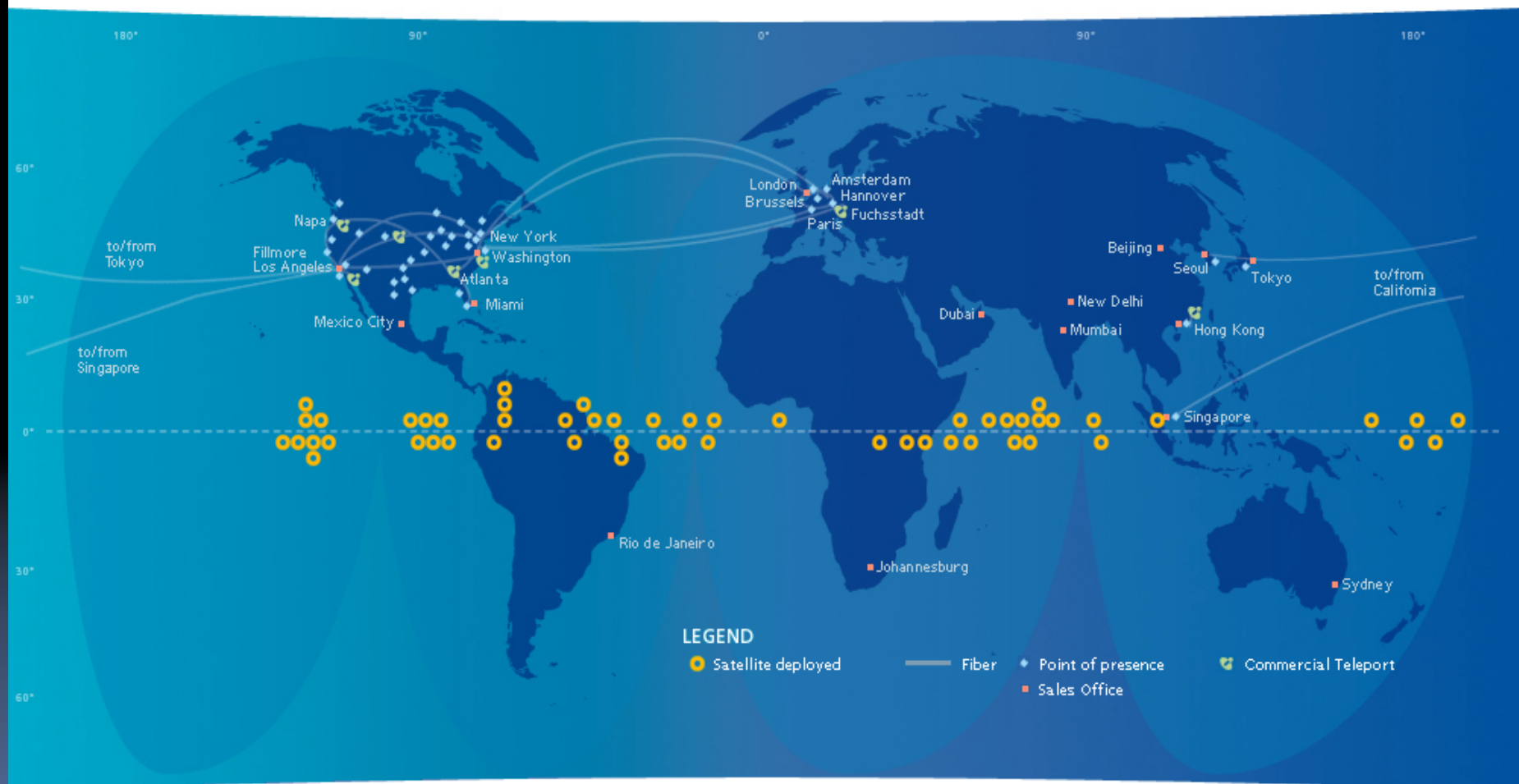
STANDARDIZED, RELIABLE AND INEXPENSIVE
ACCESS TO SPACE

SMALL PAYLOAD RIDESHARE CONFERENCE 2007

DR. BRYAN BENEDICT
INTELSAT SATELLITE SERVICES

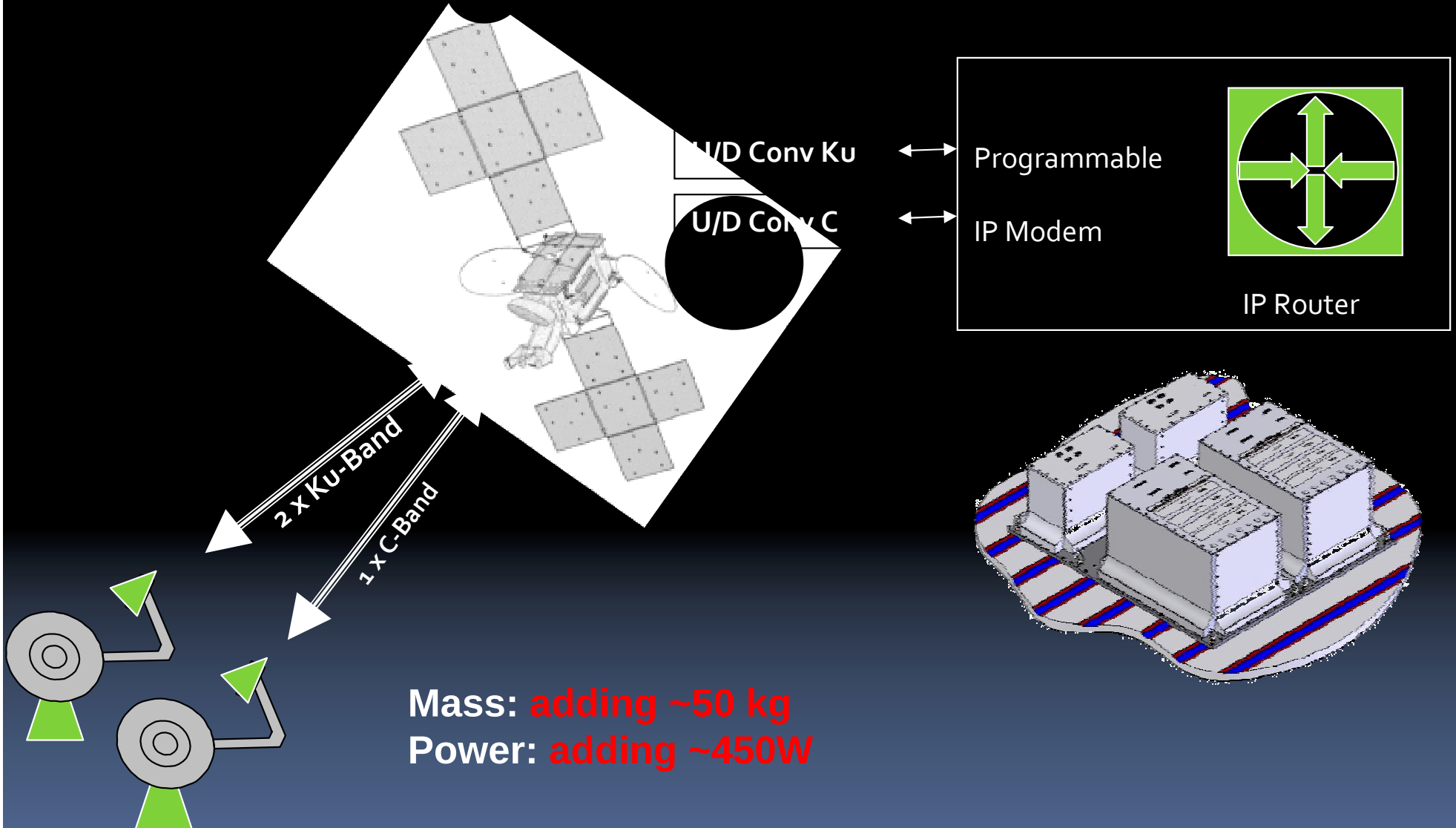
Intelsat subsatellite points

coverage maps: world view



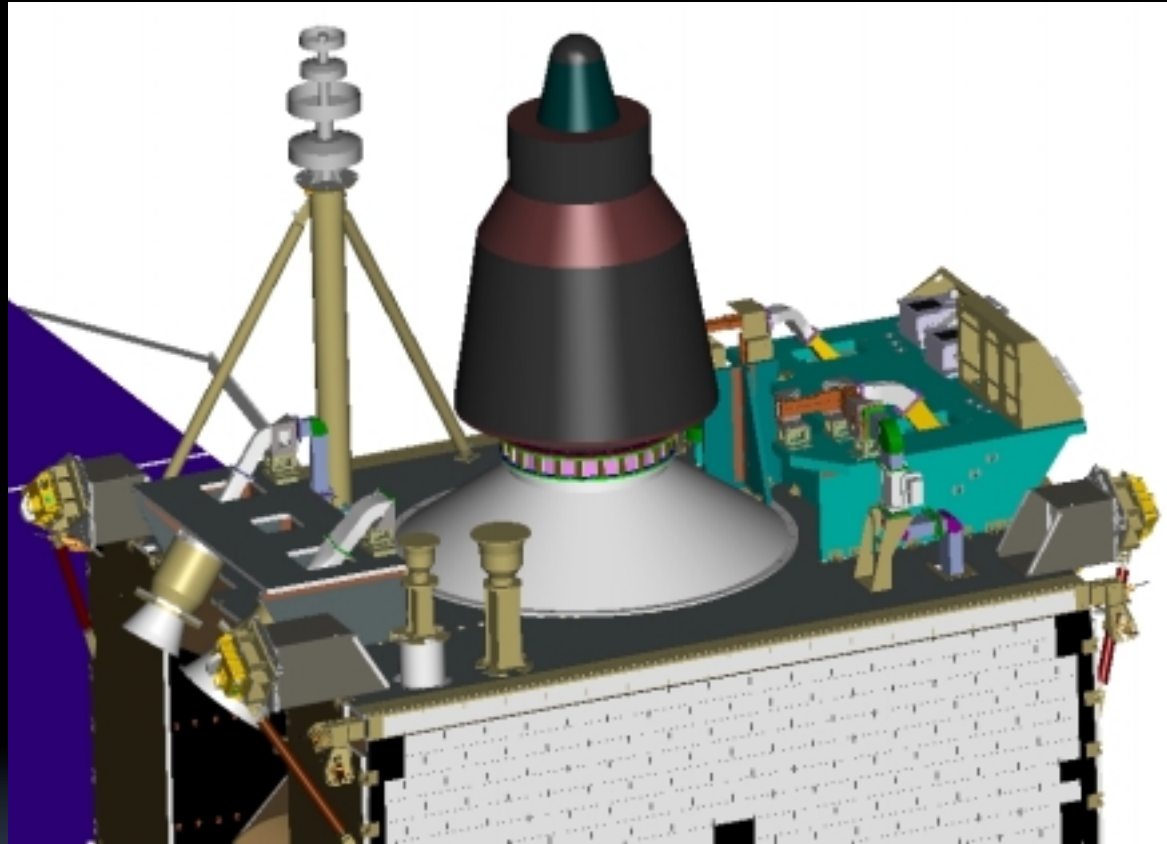
Hosted IRIS – Internet Router In Space

Loral FS-1300 Intelsat-14*



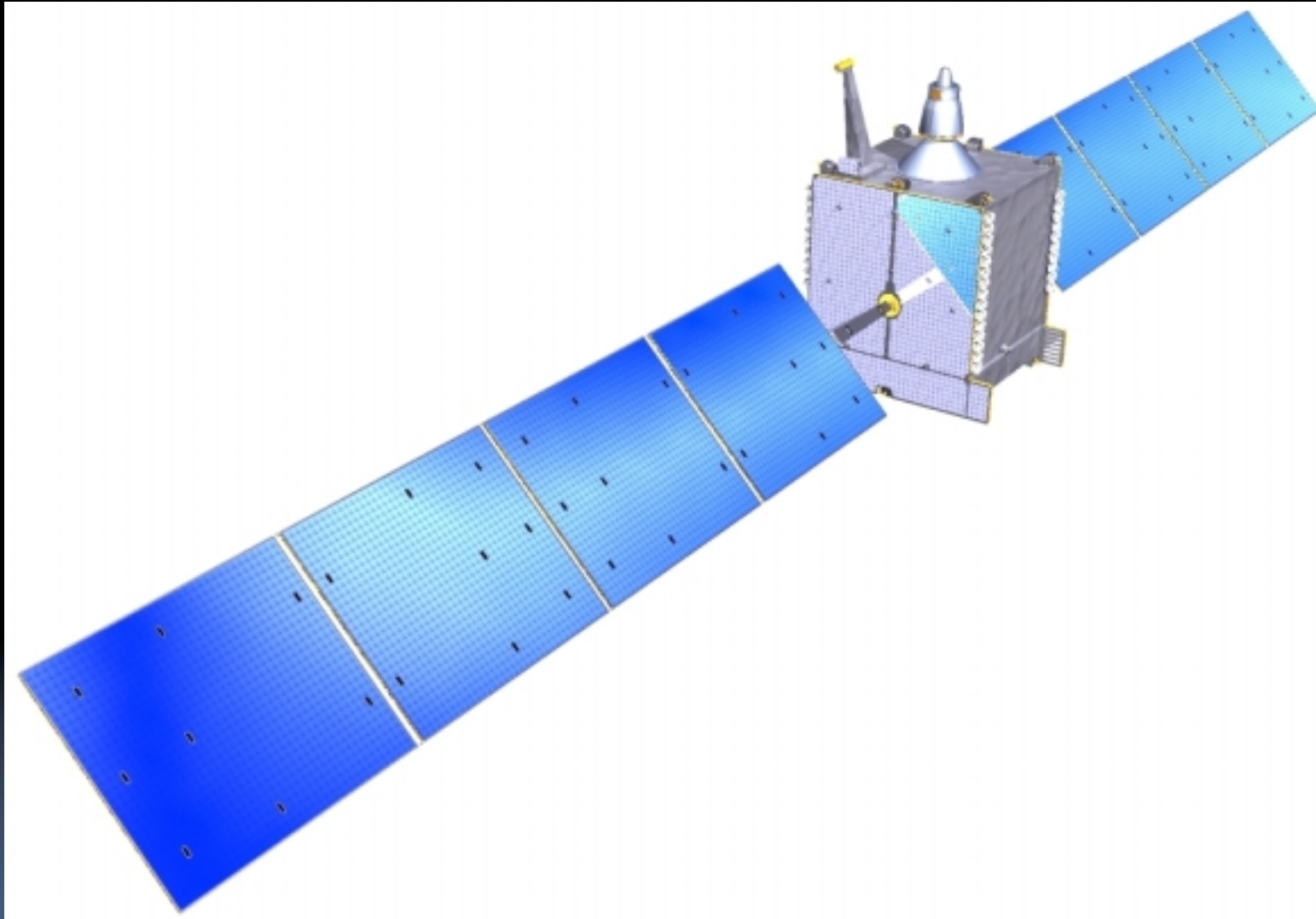
* Will launch 1Q2009 to 45W

Piggyback “Microsat” on Orbital STAR-2 Satellite



“Microsat” mated via LightBand through 15” ESPA and a potential for Phase 3 E

FS-1300 with ESPA Microsat



Antenna Reflectors not shown for clarity,
before release



Lee McLamb to the RESCUE